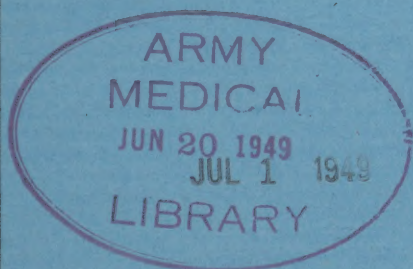


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DOCUMENT SECTION

MONTHLY HEALTH REPORT

DOCUMENT SECTION



APRIL 1949
VOL 2 NO 4

MILITARY DISTRICT OF WASHINGTON

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MONTHLY HEALTH REPORT

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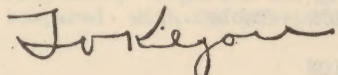
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INTRODUCTION

This publication presents periodic health data concerning personnel of the Department of the Army and Department of the Air Force personnel in the Military District of Washington. It provides factual information for measurement of increase or decrease in the frequency of disease and injury occurring at each of the posts, camps or stations shown herein.

It is published monthly by the Military District of Washington for the purpose of conveying to personnel in the field current information on the health of the various military installations in this area and on matters of administrative and technical interest. Items published herein do not modify or rescind official directives, nor will they be used as the basis for requisitioning supplies or equipment.

Contributions, as well as suggested topics for discussion, are solicited from Medical Department officers in the field.



FLOYD V. KILGORE
Colonel, MC
Surgeon

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PREVENTIVE MEDICINE

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GENERAL COMMENT

Unless otherwise indicated, references to diseases and injuries in this publication apply to all Class I and II installations exclusive of Walter Reed General Hospital. Rates are calculated on the basis of a thousand mean strength per year.

In consideration of the present mode of operation of the Army Medical Department whereby Army and/or Air Force personnel may be receiving medical treatment at either type department installation, differential health statistics for the Air Force and Army should be evaluated as an overall index of the medical sections of the reporting unit.

The non-effective rate for the command dropped slightly during the 4 week period ending 25 March from that reported for the previous period. The rates were 9.57 and 10.80 respectively.

The admission rate for all casuses for March, 389.6, reflected an increase over the 371.7 reported for February. A current total of 680 admissions is compared with 620 for the preceding period. All medical installations contributed to this rise in rate except Fort Myer (South Post) and Fort Lesley J. McNair.

Rates for disease admissions rose 22 points above that reported for the last period. The current rate, 356.9 was based on 623 cases and the 334.5 February rate was computed on 558 admissions. Much the same pattern of change in these rates is followed as appears in admission rates for all causes. The greatest increase, from 933.9 to 1022.8, was reported from Fort Myer (North Post), with Fort Myer (South Post) showing the most decided drop to 341.4 from a previous rate of 464.0. The General Dispensary, USA, although having a slightly increased rate from the month of February, had the lowest current rate with 234.1 admissions per 1000 troops per year.

A decrease is noted for injury admissions during the present month. A rate of 32.7 is compared with the preceding report period rate of 37.2. A total of 54 injury admissions were reported, 5 cases less than last month. The General Dispensary reported the greatest increase in incidence for this cause with 10 admissions in March compared with the previously reported 5 for February.

An overall MDW rate of 7.4 for psychiatric cases is reported for March. This rate is based on 13 cases reported by Fort Belvoir which resulted in that station having a rate of 17.4.

No deaths were reported by Military District of Washington units during the period ending 25 March 1949.

COMMUNICABLE DISEASE:

The common respiratory disease rate for MDW Army personnel rose 12.1 points to 88.8 for 155 cases reported. Fort Lesley J. McNair was the only station to record any significant reduction. The rate for that station dropped from 86.7 for 7 cases to 50.0 for 4 cases.

A rate of 11.5 is reported for pneumonia all types in March, computed on a total of 20 cases. The February rate was 6.0 for 10 cases. Pneumonia atypical accounted for 6 cases of the current total for a rate of 3.4.

Influenza occurrence more than doubled during March. Fort Myer, (North Post) reflected the largest increase with a rate of 155.6 for 21 cases compared with 8 cases and 59.8 rate in February. A total of 33 cases resulting in a rate of 18.9 for March were recorded.

Of the other communicable diseases, measles with a current rate of 14.3 for 25 cases rose from 16 cases and a 9.6 rate in February. Mumps also reflected an overall increase with 17 cases and a resultant rate of 9.7 compared with 5 cases and rate of 3.0 for last month. A total of 6 cases of diarrheal disease were reported for a 3.4 rate in March. Scarlet Fever, Tuberculosis, Rheumatic Fever and Hepatitis were absent or reflected only minor change.

Pertinent Statistical tables may be found on pages 2 and 4.

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RESTRICTED**PREVENTIVE MEDICINE****GENERAL DATA**

4 Week period Ending 25 March 1949
(Data from WD AGO Form 8-122)

STATION	MEAN STRENGTH			ADMISSIONS						Non-Effective Rate	Number of CDD's	Number of Deaths
	Total	White	Negro	All Causes		Disease		Injuries				
				Cases	Rates	Cases	Rates	Cases	Rates			
Fort Belvoir	9,736	8,514	1,222	255	340.5	236	315.1	19	25.4	17.98	13	0
Fort McNair	1,040	956	84	40	500.0	31	387.5	9	112.5	5.04	0	0
Fort Myer (North Post)	1,754	1,543	211	150	1,111.7	138	1,022.8	12	88.9	8.79	0	0
Fort Myer (South Post)	1,942	1,942	0	522	348.1	51	341.4	1	6.7	1.29	0	0
General Dispensary, USA	6,275	6,245	30	123	254.8	113	234.1	10	20.7	2.56	0	0
All Others	1,945	1,945	0	60	401.0	54	360.9	6	40.1	1.49	0	0
Total Mil Dist of Wash	22,692	21,145	1,547	680	389.6	623	356.9	57	32.7	9.57	13	0
Army Medical Center	2,782	2,514	268	159	743.0	149	696.3	10	46.7	454.28	137	3
Total Dept/Army Units	25,474	23,659	1,815	839	428.2	772	394.0	67	34.2	57.17	150	3
CLASS III UNITS												
Andrews Air Force Base	3,884	3,884	0	87	291.2	72	241.0	15	50.2	2.71	0	0
Bolling Air Force Base	5,520	5,520	0	152	358.0	140	329.7	12	28.3	9.93	0	1
1254th MATS	577	577	0	14	315.4	14	315.4	0	-	1.05	0	0
Total Dept/Air Force Units	9,981	9,981	0	253	329.5	226	294.4	27	35.1	6.61	0	1
Consolidated Total	35,455	33,640	1,815	1,092	400.3	998	365.9	94	34.4	42.94	150	4

ADMISSIONS, SPECIFIED DISEASES - RATE PER 1000 PER YEAR

4 Week Period Ending 25 March 1949

(Data From WD AGO Form 8-122)

STATION	Common Respiratory Diseases	Pneumonia All Types	Pneumonia Atypical	Influenza	Measles	Mumps	Scarlet Fever	Tuberculosis	Rheumatic Fever	Diarheal Disease	Hepatitis	Malaria	Psychiatric Diseases
Fort Belvoir	48.1	20.0	2.7	2.7	25.4	13.4	-	-	-	1.3	2.7	-	17.4
Fort McNair	50.0	-	-	-	-	-	-	-	-	25.0	-	-	-
Fort Myer (North Post)	281.6	14.8	14.8	155.6	29.6	29.6	-	-	-	22.2	-	-	-
Fort Myer (South Post)	53.5	-	-	53.5	-	6.7	-	-	-	-	-	-	-
General Dispensary, USA	103.6	6.2	4.1	2.1	-	4.1	-	-	-	-	4.1	-	-
All Others	126.9	-	-	6.7	13.4	-	-	-	-	-	-	-	-
Total Mil Dist of Wash	88.8	11.5	3.4	18.9	14.3	9.7	-	-	-	3.4	2.3	-	7.4
Army Medical Center	32.7	4.7	4.7	-	18.7	-	-	4.7	-	4.7	4.7	-	-
Total Dept/Army Units	82.7	10.7	3.6	16.8	14.8	8.7	-	0.5	-	3.6	2.6	-	-
CLASS III UNITS													
Andrews Air Force Base	70.3	3.4	-	3.4	-	-	-	-	-	3.4	-	-	-
Bolling Air Force Base	18.8	4.7	4.7	21.2	21.2	4.7	-	-	4.7	9.4	-	-	21.2
1254th MATS	112.7	-	-	-	-	-	-	-	-	-	-	-	-
Total Dept/Air Force Units	44.3	3.9	2.6	13.0	11.7	2.6	-	-	2.6	6.5	-	-	11.7
Consolidated Total	71.9	8.8	3.3	15.8	13.9	7.0	-	0.4	0.7	4.4	1.8	-	8.1

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VENEREAL DISEASE: ARMY TROOPS

Incidence of venereal disease among Department of the Army personnel of the MDW excluding Walter Reed General Hospital, reflected a sharp drop during the current period. The overall rate 14.89 for 26 cases is compared with the rate of 22.18 for 37 cases in February. A reduced rate for the current period from Fort Belvoir was largely responsible for the general improvement. That station reported 19 cases and a rate of 25.37 for March against 27 cases and a 38.76 rate in February.

Of the total cases reported, white personnel incurred 18 cases and among Negro troops, 8 cases were treated. The respective rates were 11.07 and 67.23. Both rates were lower than those of the previous report period; the white rate showing the greatest improvement with a reduction from 27 cases and a rate of 18.29 to 11.07 for 18 cases.

The Army Medical Center (Walter Reed General Hospital) reported an increased incidence among white troops which offset the reduction reflected for that station among Negro personnel. A total of 5 cases were reported, for a rate of 23.36 compared with the previous month's 18.76 rate.

VENEREAL DISEASE: AIR FORCE TROOPS

A reduction in the total rate for Department of the Air Force units in the area is reported in the current 18.23 rate, compared with 29.41 for February.

The current rate is based on 14 cases reported from white troops. No Negro personnel were assigned during the period.

All Air Force units reported reduced rates. No cases were reported from the 1254th MATS for March.

Pertinent statistical tables and charts may be found on pages 4, 5, 6, and 7.

NEW VENEREAL DISEASE CASES - EXCL EPTS - MARCH AND FEBRUARY

STATION	Rate per 1000 per year	
	FEBRUARY 49	MARCH 49
Fort Belvoir	38.76	25.36
Fort McNair	12.38	12.50
Fort Myer (North Post)	22.41	22.24
Fort Myer (South Post)	12.89	13.42
General Dispensary, USA	2.24	-
All Others	19.45	6.68
Total Mil Dist Wash Units	22.18	14.93
Army Medical Center	18.76	23.36
Total Dept/Army Units, Mil Dist of Washington	21.79	15.82
CLASS III UNITS		
Andrews Air Force Base	32.98	16.73
Bolling Air Force Base	27.82	21.19
1254th MATS	21.07	
Total Class III Units	29.41	18.23
CONSOLIDATED TOTAL	24.03	16.49

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CHART 1

ADMISSION RATES BY MONTH, ALL CAUSES, COMMON RESPIRATORY DISEASE AND INJURY

MDW RATE PER 1000 TROOPS PER YEAR

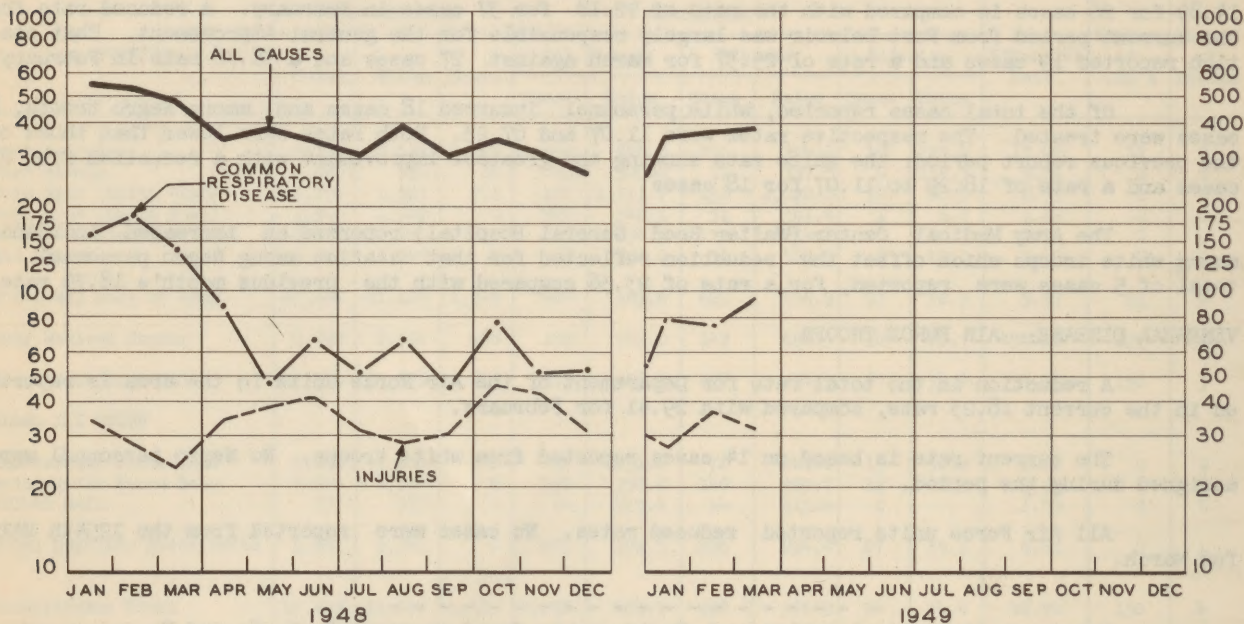
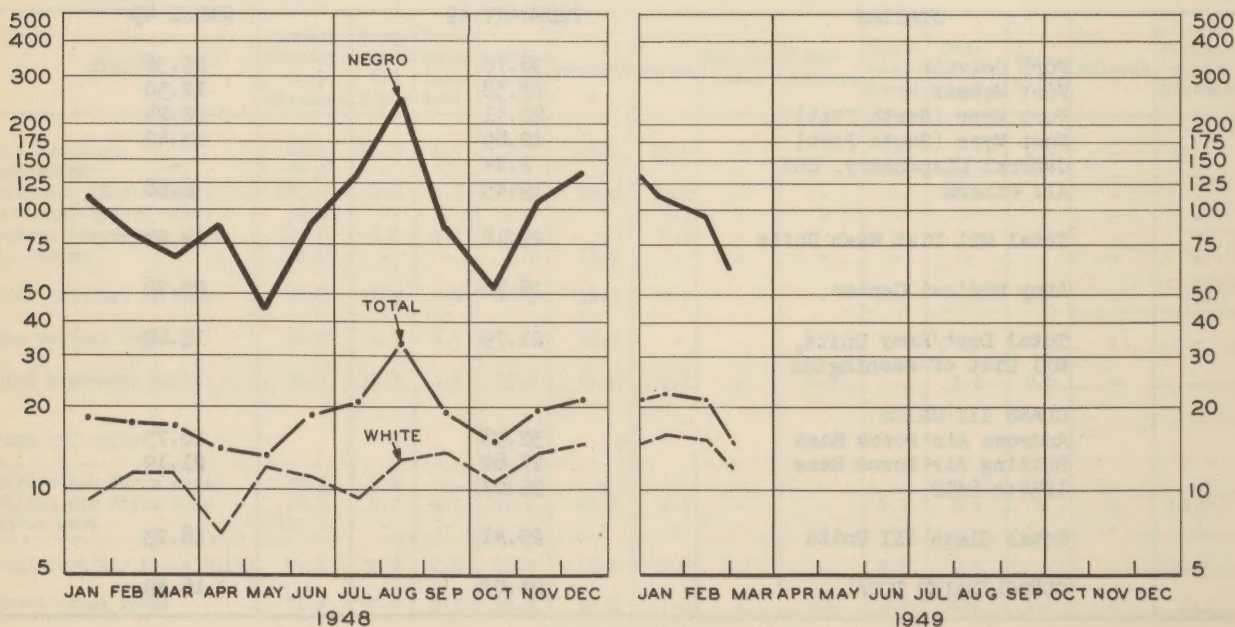


CHART 2

ADMISSION RATES BY MONTH VENEREAL DISEASES MDW INCL. ARMY MEDICAL CENTER

RATES PER 1000 TROOPS PER YEAR

INCLUDES ALL CASES REPORTED ON WD AGO 8-122 EXCEPTING THOSE EPTS



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CONSOLIDATED MONTHLY VENEREAL DISEASE STATISTICAL REPORT For the Four Week Period Ending 25 March 1949 (Data from WD AGO 8-122) (Chargeable Cases)

STATION	R A C E	Mean Strength	Number of Cases-EPTS Not Included				Rate per 1000 Troops per Annum	Total Days Lost From Duty (Old & New Cases)
			Syphilis	Gonorrhea	Other	Total		
Fort Belvoir	W	8,514	1	11	0	12	18.32	1
	N	1,222	1	6	0	7	74.47	1
	T	9,736	2	17	0	19	25.37	2
Fort McNair	W	956	1	0	0	1	13.60	0
	N	84	0	0	0	0	-	0
	T	1,040	1	0	0	1	12.50	0
Fort Myer (North Post)	W	1,543	0	2	0	2	16.85	0
	N	211	0	1	0	1	61.61	0
	T	1,754	0	3	0	3	22.23	0
Fort Myer (South Post)	W	1,942	0	2	0	2	13.39	0
	N	0	0	0	0	0	-	0
	T	1,942	0	2	0	2	13.39	0
General Dispensary, USA	W	6,245	0	0	0	0	-	0
	N	30	0	0	0	0	-	0
	T	6,275	0	0	0	0	-	0
All Others	W	1,945	0	1	0	1	6.68	0
	N	0	0	0	0	0	-	0
	T	1,945	0	1	0	1	6.68	0
Total Mil Dist of Wash	W	21,145	2	16	0	18	11.07	1
	N	1,547	1	7	0	8	67.23	1
	T	22,692	3	23	0	26	14.89	2
Army Medical Center	W	2,514	1	3	0	4	20.68	604
	N	268	0	1	0	1	48.51	362
	T	2,782	1	4	0	5	23.36	966
Total Dept/Army Units	W	23,659	3	19	0	22	12.09	605
	N	1,815	1	8	0	9	64.46	363
	T	25,474	4	27	0	31	15.82	968
CLASS III UNITS Andrews Air Force Base	W	3,884	1	4	0	5	16.73	6
	N	0	0	0	0	0	-	0
	T	3,884	1	4	0	5	16.73	6
Bolling Air Force Base	W	5,520	3	5	1	9	21.19	49
	N	0	0	0	0	0	-	0
	T	5,520	3	5	1	9	21.19	49
1254th MATS	W	577	0	0	0	0	-	0
	N	0	0	0	0	0	-	0
	T	577	0	0	0	0	-	0
Total Dept/Air Force Units	W	9,981	4	9	1	14	18.23	55
	N	0	0	0	0	0	-	0
	T	9,981	4	9	1	14	18.23	55
Consolidated Total	W	33,640	7	28	1	36	13.91	660
	N	1,815	1	8	0	9	64.46	363
	T	35,455	8	36	1	45	16.49	1,023

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VENEREAL DISEASE RATES FOR THE US *

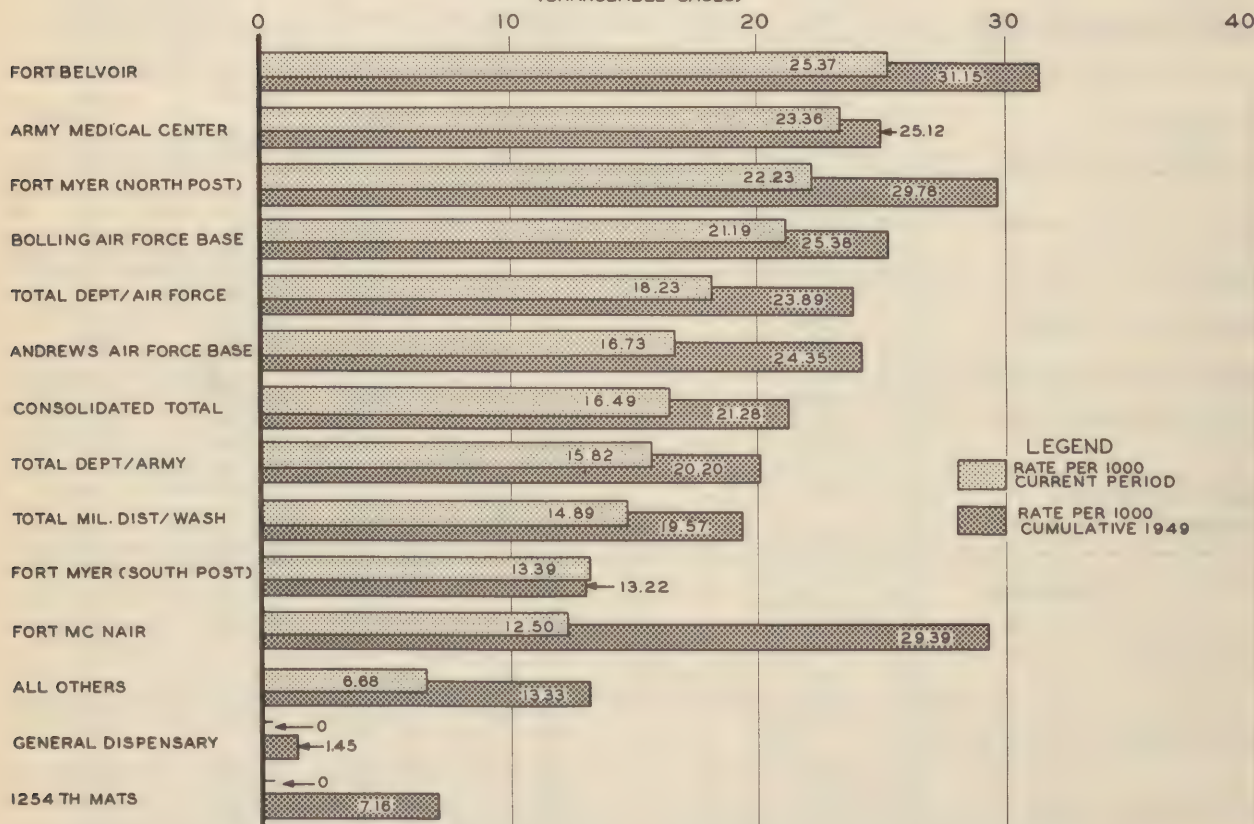
(All Army Troops)

	MARCH 1949	FEBRUARY 1949
First Army Area	29	24
Second Army Area	22	22
Mil District of Washington	16	23
Third Army Area	27	27
Fourth Army Area	24	18
Fifth Army Area	18	20
Sixth Army Area	19	22
Total, United States	23	22

* Compiled in the Office of the Surgeon General and include General Hospitals and Class III Installations.

VENEREAL DISEASE RATES PER 1000 PER YEAR FOUR WEEK & CUMULATIVE TOTALS ENDING 25 MARCH 49

TOTAL WHITE & NEGRO PERSONNEL
(CHARGEABLE CASES)

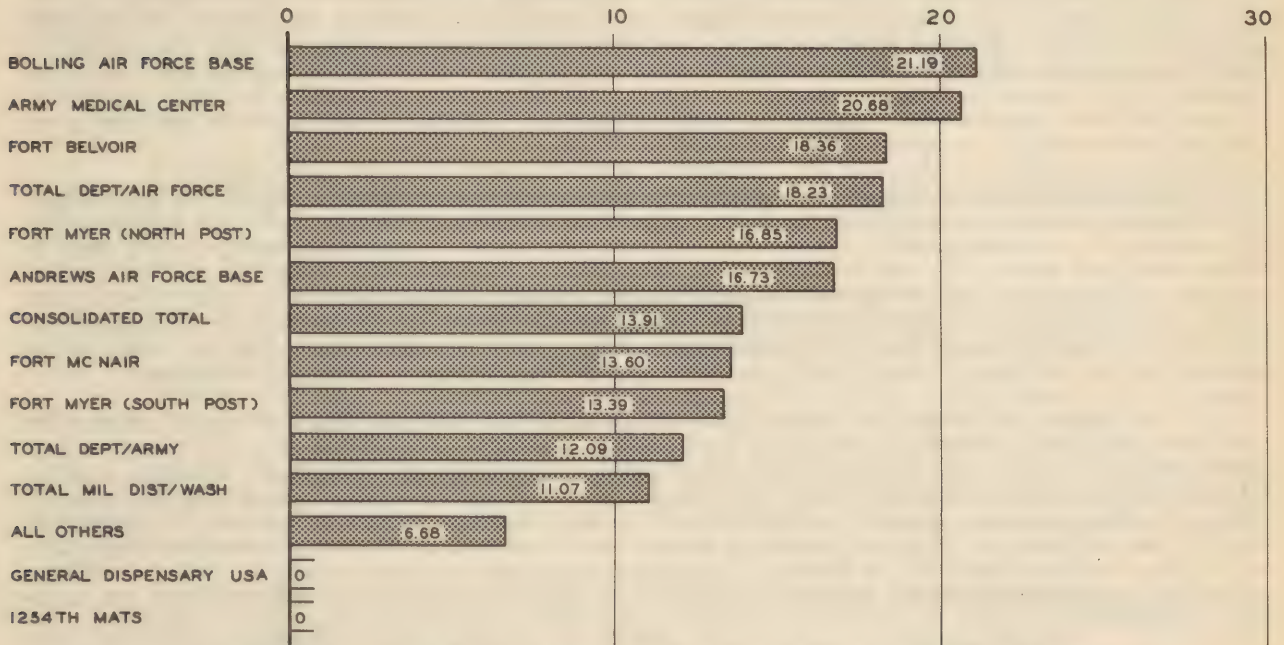


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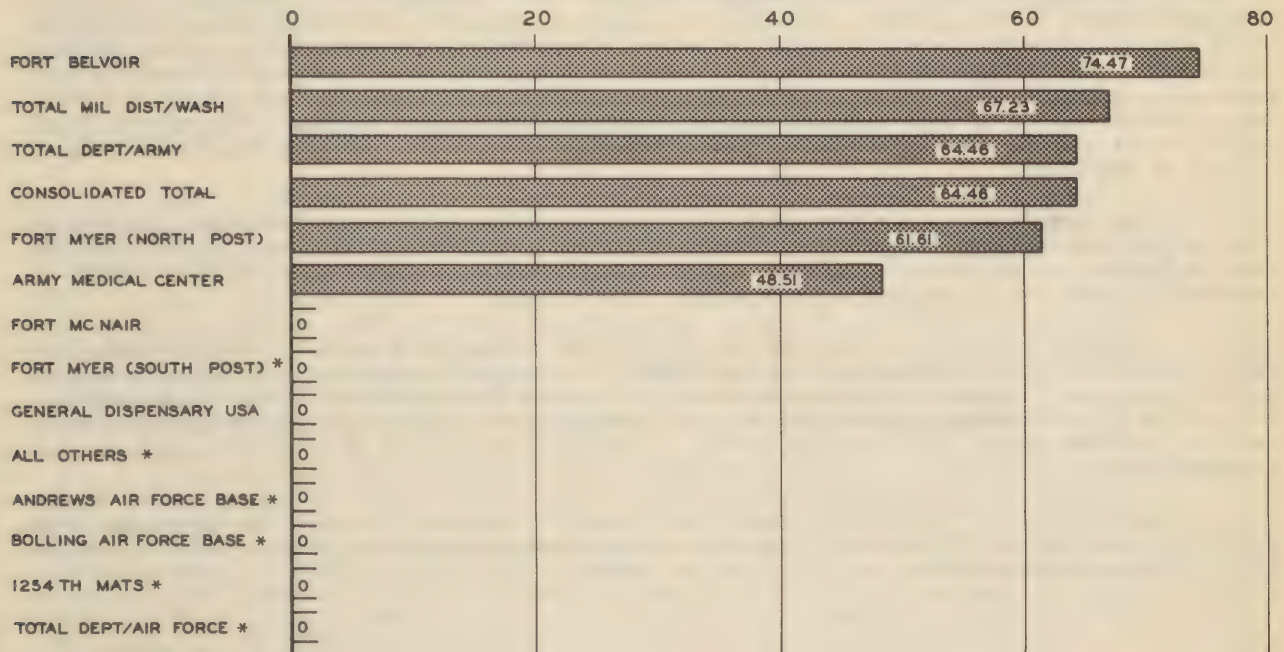
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VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR 4 WEEK PERIOD ENDING 25 MARCH 1949 WHITE PERSONNEL (CHARGEABLE CASES)



VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR 4 WEEK PERIOD ENDING 25 MARCH 1949 NEGRO PERSONNEL (CHARGEABLE CASES)



* No Negro Personnel Assigned.

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PREVENTIVE MEDICINE

OCCUPATIONAL MILITARY HYGIENE

The interests included in this part of preventive medicine are interpreted as those having to do with the personal health hazards that an individual experiences by reason of an occupation as a soldier. This statement of interest appears clear enough, but that no confusion may exist, let it be said categorically that as here defined it has nothing to do with the health of civilian workers in munitions or other war time industries under government or other control. Like most occupations, that of a soldier is attended with health risks related closely to the nature of his employment. It is these personal occupational health hazards of the soldier in the field which constitute military occupational hygiene as here defined and considered as separate from the group risks he experiences as a member of the military community.

Military medicine has always given full consideration to community aspects of prevention. Environmental sanitation has reached a high order of development. The level of accomplishment in the control of the communicable diseases is evident. The rates for typhoid fever in the army in Europe were less during the war years than in the state of Michigan--and Michigan has long had an enviable health record. More tetanus occurred among soldiers stationed in the United States than in the battle zone of the European Theater. These group problems receive admirable attention. If there be criticism of the general military program, it is that too little attention is given to the personal health problems of individuals, but that is also applicable to civilian conditions.

No better illustration of this kind of military occupational hygiene existed in the war just past than that provided by the Army Air Forces. A section called The Care of the Flier was organized on an equal and coordinate level with other activities in preventive medicine, such as epidemiology, sanitation and nutrition. The service that was provided related directly to the individual, to his physical, mental, psychologic and moral reactions under the stress of the work to which he was assigned, in relation to length of service and to the environment in which he found himself. This is the same sort of interest to which peace time civilian industry gives increasing attention, as a general concern and particularly in relation to key men in administrative and technical positions.

Military occupational hygiene has to do additionally with housing and with matters of clothing and equipment, as war spreads to many climates and to a variety of physical environments. It has to do with the newer physical, chemical and bacteriological hazards as war becomes more technological. Health education is a principal concern. The development of preventive psychiatry necessarily rests on the personal approach. An important mechanism for accomplishing this purpose would seem to reside in a periodic health inventory of the individuals of all units, as an addition to the well established sick call. The principal aim of that army institution is to determine disease in its beginnings; but the onus is wholly upon the individual through his initiative in reporting. A portion of the obligation might well be transferred to the unit surgeon. The success of the venture would depend on his interest and initiative, for this is not a project which can be accomplished by directive.

The same general principles govern the practice of preventive medicine under military and civilian conditions. Both fields have developed similarly. The scope of military preventive medicine is limited by the kinds of population with which it deals. It is broadened by an extension of interests to many and varied parts of the world.

Military medicine is characterized by an equal emphasis on curative and preventive aspects. Junior medical officers thus find opportunity for what is interpreted as a residency in preventive medicine. The training and experience to be derived conceivably contribute to enlarged opportunities in subsequent private practice; are fundamental to a continued career in the military services; and can become the foundation for an ultimate specialization in preventive medicine and epidemiology.

Extracted from "The Military Surgeon", Volume 104, Number 1, January 1949 by Colonel John E. Gordon, M.C., A.U.S., Professor of Preventive Medicine and Epidemiology, Harvard School of Public Health, Boston, Massachusetts.

PROFESSIONAL SERVICES

CHLOROMYCETIN AND OTHER ANTIBIOTICS

It is evident from the published data that, great as is the therapeutic advance brought about by penicillin, aureomycin, and streptomycin, they are not by any means the final answer to the question of control of infectious disease. The search, therefore, goes on for new and powerful antibiotics which will extend the range of organisms susceptible to specific therapy. As yet few clinical reports have appeared, but some of the recently discovered antibiotics show promise.

Chloromycetin

Chloromycetin, which is known to be effective in the laboratory against rickettsiae and against certain viruses of the psittacosis-lymphogranuloma venereum group, has given encouraging results in the treatment of epidemic typhus in Mexico and of scrub typhus in Kuala Lumpur.^{1,2} It is effective when given by mouth.

Twenty-five patients, with proven scrub typhus, were treated with chloromycetin, with no complications. In a control group of 12, there was one death, one case of parotitis and one of pneumonia. The use of chloromycetin cut in half the average duration of fever and of hospital stay.

Similar results were obtained on the Mexican patients with typhus fever. The investigators feel that further clinical use of streptomycin is indicated in these rickettsial infections.

During the course of later Malayan experiments, it was found that 2 of the chloromycetin-treated patients had been suffering from typhoid instead of scrub typhus. Their rapid response to chloromycetin led to its use in 9 other cases of typhoid fever.³ All of these recovered, including two who were gravely ill with hemorrhage and intestinal perforation.

The recommended dosage of chloromycetin is 50 mg. per kg. initially, by mouth, followed by 0.2 to 0.3 Gm. every 2 to 4 hours for twenty-four hours for a total of about 6 Gm. Blood assays were not found necessary. There were no ill effects from the use of chloromycetin.

Polymyxin

Polymyxin⁴ derived from a soil organism, *B. polymixa*, is active against Gram-negative organisms in the presence of serum and, unlike streptomycin, does not give rise to resistant strains. Its toxicity, however, is greater than that of penicillin or streptomycin. It is active against *B. coli*, *H. pertussis*, *B. aerogenes*, *Br. abortus*, and some varieties of *salmonella* and *shigella*. Clinically, it has been used to treat patients infected with *Ps. pyocyanea*, *K. pneumoniae*, *H. pertussis* and *Br. abortus* with encouraging results, but clinical data are at present too meager to permit final evaluation.

Stansly, Shepard and White⁵ found that polymyxin was markedly active against Gram-negative bacteria and that in experimental infection with five highly virulent strains of *Klebsiella pneumoniae*, a single dose of 10 micrograms of polymyxin hydrochloride to a white mouse weighing 16 to 24 Gm. protected 80 to 100% of the animals, while a dose of 40 mg. was similarly effective against five strains of *Pasteurella multocida*. Polymyxin was equally effective whether given immediately or four hours after infection. When fourteen million lethal doses of *Klebsiella* were given, 6.4 mg. of polymyxin hydrochloride was required for 90 to 100% survival. Subcutaneous or intravenous dosage was equally effective but oral administration needed sixty-four times the dose to obtain the same therapeutic response. A single daily dose of polymyxin per kg. of body weight for four days protected two-week-old chickens against an otherwise fatal fowl typhoid infection.

Polymyxin preparations showed no histamine-like activity. Injections of 0.75% solution of the hydrochloride caused local skin irritation. The formaldehyde-bisulfite derivative gave no such irritation even in 15% solution and also had a lower acute toxicity. There was no evidence of chronic toxicity when young rats were given 100 mg. per kg. of body weight per day, subcutaneously, for thirty days. Schoenback⁶ found that polymyxin was relatively heat-stable and lost little of its activity in the presence of serum. It was most effective in an acid medium. It was impossible to produce resistant strains from susceptible organisms in vitro. There are indications that the chemical composition of polymyxin is different from that of aerosporin although they are derived from similar microorganisms.

PROFESSIONAL SERVICES

The acute toxicity of polymyxin for animals is greater than that of penicillin or streptomycin. It does not pass the meninges and is excreted slowly in the urine. Clinical use has confirmed its therapeutic efficiency, and it was found to be curative in experimental meningococcal infections in mice, although it seems to have no effect on *Neisseria* in vitro. Total daily doses of up to 5 mg. per kilo have been used clinically. Bliss, Chandler, and Schoenbach⁷ state that most strains of *E. coli.*, *Aerobacter*, Friedlander's bacillus, *Pseudomonas aeruginosa* and *H. influenzae* are susceptible. In vitro, certain strains of *proteus* and *meningococcus* were found to be resistant. The combination heat and serum appeared to be harmful to polymyxin. Attempts to produce drug-resistance in sensitive strains were unsuccessful. Further work is needed before this drug can be recommended.

Bacitracin

Bacitracin has given favorable results in 86% of 186 cases of surgical infection⁸ and is at present undergoing extensive clinical trial, the outcome of which will be awaited with interest.

Subtenolin

Subtenolin⁹ an antibiotic from *B. subtilis*, displays marked antistaphylococcal activity in vitro and also inhibits the growth of *E. typhosa*, *E. coli*, *Salmonella enteritidis* and Schottmuel-leri, and *Micrococcus conglomeratus*. Two strains of *pasteurella* also showed marked susceptibility. The growth of *M. tuberculosis* was partially inhibited. No clinical results are as yet available.

Aerosporin

Aerosporin¹⁰ resembles polymyxin in the range of organisms which it will inhibit, as well as in its toxicity. Neither antibiotic will penetrate the barrier between blood and brain. In its initial trials, aerosporin was found to contain a factor damaging to the renal tubules--a serious drawback to its therapeutic use. But more recently, the employment of a special strain of *B. aerosporus* has permitted the production of an aerosporin free of nephrotoxic factor. Clinical trials are under way.

Ainsworth and fellow workers¹¹ state that weight for weight aerosporin has the same order of chemotherapeutic activity against Gram-negative organisms as has penicillin against Gram-positive organisms.

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2. Smadel, J. E.; Woodward, T. E.; Ley, H. L. Jr.; Philip, C. B.; Traub, R.; Lewthwaite, R., and Savor: *Science* 108:160 (Aug. 13) 1948.
3. *Science News Letter*: 54:34 (July 17) 1948.
4. Editorial: *Lancet* 1:875 (June 5) 1948.
5. Stansly, P. G.; Shepard, R. G., and White, H. J.: *Bull. Johns Hopkins Hosp.* 81:43 (July) 1947.
6. Schoenbach, E. B.; Bryer, M. S.; Bliss, E. A., and Long, P. H.: *J.A.M.A.* 136:1096 (Apr. 24) 1948.
7. Bliss, E. A.; Chandler, C.A., and Schoenbach, E. B.: *Bull. Johns Hopkins Hosp.* 82:635 (June) 1948.
8. *Science News Letter*, 53:23 (Jan. 10) 1948.
9. Hirschhorn, H. N.; Bucca, M. A., and Thayer, J. D.: *Proc. Soc. Exper. Biol. and Med.* 67:429 (April) 1948.
10. Brownlee, G., and Bushby, S.R.M.: *Lancet* 1:127 (Jan. 24) 1948.
11. Ainsworth, G. C.; Brown, A. M., and Brownlee, G.: *Nature* 160:263 (Aug. 23) 1947.

(Extracted from "Recent Trends in Antibiotic Therapy" by Lederle Laboratories: 1948)

DENTAL SERVICE

DENTAL SERVICE - MONTH OF MARCH 1949

STATION	Offi- cers	Days of Duty	Sit- tings	Amal- gam	Oxy and Amal	Sili- cate	In- lays	Bridges	Bridge Repair	Crowns	Dentures			Extrac- tions	Calcu- lus Removed	X-Rays	Exami- nations
											Full	Par- tial	Re- Pair				
Fort Belvoir	6	186	1464	516	664	35	0	7	5	1	14	29	16	428	198	220	1115
Fort McNair	1	31	525	261	112	7	0	1	1	0	1	6	3	65	96	113	78
Fort Myer (North Post)	1	31	993	223	75	30	2	1	1	2	4	5	10	60	23	792	387
Fort Myer (South Post)	1	31	404	180	36	38	0	0	1	0	0	6	2	76	3	358	136
General Dispensary, USA	3	90	2032	215	99	85	1	3	8	2	13	30	2	79	278	644	939
All Others	1	30	187	89	3	19	0	1	0	2	0	5	0	23	0	14	77
Total Mil Dist of Wash	13	399	5605	1484	1000	603	3	13	16	7	32	81	33	731	589	2141	2732

The above chart does not include the number or total days work of civilian dentist.

SALIVARY ALKALI AND DENTAL CARIES

Experiments to establish the relationship between the pH values of saliva and dental caries seem to indicate that (1) all such values are much the same in the normal caries-free mouth. The rise is rapid and sugar does not cause a fall. The rise is probably due, not to ammonia formation, but to rapid carbon dioxide loss and to the presence of alkali bicarbonate and monohydrogen phosphate; (2) caries-active cases show both an initial low pH and very little rise. With addition of glucose a rapid and dangerous fall in pH occurs but with the addition of both urea and glucose the pH rises, due to the large formation of ammonia; (3) caries-free cases with periodontitis and calculus present in the mouth show a moderate rise in pH of normal saliva, a slight drop with glucose present, a high rise in the presence of both glucose and urea, aided by an increase in ammonia formation.

It appears that freedom from caries may be obtained in two ways: (a) in a normal mouth by a pH rise in saliva due to alkaline salts; (b) in a caries-active mouth by addition of urea to saliva in some suitable manner and at the right time.

It is apparent that, since saliva itself does not contain sufficient urea to have much influence on the carious process in most cases, the addition of urea to the mouth at the most suitable time, immediately after a meal, should be of benefit. Based on the help that ammonia can give, the harmlessness and diffusibility of urea, the rapidity of urea hydrolysis and the detergent and stimulating qualities of paraffin wax, experiments were made with a dental "chew" consisting of paraffin wax, urea, saccharin and oil of peppermint.

The results suggest the utilization of a chewing gum containing no fermentable carbohydrate but possessing urea, to be used for periods up to thirty minutes after each meal. The continued use of urea would not only furnish the material for alkalization by bacteria in dental plaques but would also encourage urea-hydrolyzing organisms in the mouth at the expense of some of the pathogenic organisms. Chewing would give functional activity to develop normal gingivae, dentition and jaws and also aid oral hygiene. A very small amount of urea might be added to starch and sugars in bulk so that food residues would have an agent present to counteract acid formation.

Further, an ordered as well as balanced diet is essential for caries control. Refined carbohydrate consumption must be cut down and whenever consumed must be followed by some detergent food. When possible, toothbrush hygiene should follow each meal. Mouthwashes help control caries but may not be practical for general use.

Extracted from "Dental World", Volume 1, Number 1, 1946, Quarterly Journal of the Pierre Fauchard Academy, by J. E. Cary, D.B.Sc.

MISCELLANEOUS

OUTPATIENT SERVICE

Consolidated statistical data on the outpatient service, Military District of Washington, less Walter Reed General Hospital, and U.S.A.F. installations for the four week period ending 25 March 1949, are indicated below:

ARMY:

Number of Outpatients.....15,272
Number of Treatments.....22,683

NON ARMY:

Number of Outpatients..... 9,101
Number of Treatments.....17,556

NUMBER OF COMPLETE PHYSICAL EXAMINATIONS CONDUCTED..... 2,411

NUMBER OF VACCINATIONS AND IMMUNIZATIONS ADMINISTERED.. 9,625

HOSPITAL MESS ADMINISTRATION (Data from WD AGO Form 8-210)

STATION	December 48	January 49	February 49	March 49
FORT BELVOIR				
Income per Ration	\$ 1.146	\$ 1.165	\$ 1.113	\$ 1.071
Expense per Ration	1.203	1.067	1.015	1.054
Gain or Loss	- 0.057	+ 0.098	+ 0.098	+ 0.016

POUNDS MEAT AND MEAT FOOD AND DIARY PRODUCTS INSPECTED MARCH 1949 (Data obtained from WD AGO Form 8-134)

	CLASS * 3	CLASS * 4	CLASS * 5	CLASS * 6	CLASS * 7	CLASS * 8	CLASS * 9	TOTAL
Fort Lesley J. McNair		730,022	88,391		161,413	9,429		989,255
Fort Belvoir, Virginia		267,294	273,706		562,875	73,003		1,176,878
Potomac Yards Distribution Point		330,045	173,982	451,719				919,746
Fort Myer, Virginia		170,471	219,231		382,502	6,713		778,917
Mil Dist/Washington Vet Det	264,550							264,550
US Navy	43,996							43,996
The Pentagon						312,456		312,456
Total	308,546	1,497,832	719,310	451,719	1,106,790	401,601		4,485,798
Army Medical Center		187,373	74,592		261,965	5,106		529,036
Washington Quartermaster		96,344	68,001		223,490	7,221		395,056
Andrews Air Force Base		77,895	66,334		148,382	17,562		310,173
Bolling Air Force Base		119,220	131,259		263,799	37,225	2,107	553,610
Total		480,832	340,186		896,636	67,114	2,107	1,787,875
Grand Total	308,546	1,978,664	1,059,496	451,719	2,004,426	468,715	2,107	6,273,673
REJECTIONS:								
The Pentagon						1,379		1,379
Not type, class or grade								
US Navy	8,410							8,410
Not type, class or grade								
Mil Dist/Washington Vet Det	1,310							1,310
Not type, class or grade								
TOTAL REJECTIONS	9,720					1,379		11,099

*Class 3 - Prior to Purchase

*Class 4 - On delivery at Purchase

*Class 5 - Any Receipt Except Purchase

*Class 6 - Prior to Shipment

*Class 7 - At Issue or Sale

*Class 8 - Purchase by Post Exchanges, Clubs, Messes or Post Restaurants

*Class 9 - Storage

ADMINISTRATIVE DIVISION

DEFINITIONS OF TERMS

Admissions

In the general classification of admissions by disease and injury, the term "admission" refers to direct admissions, but also includes a certain number of cases carded for record only. Admissions reported as All Causes, Diseases, and Injuries represent the number of patients ("excused from duty," plus certain CRO patients) in these major categories. Among the number of cases shown for any diagnostic category, however, are included cases of patients directly admitted for other causes among whom the specific condition, though present at the time of admission, was not the primary cause of admission. In addition, these counts include those patients among whom the specific condition was discovered while the patient was being treated for other conditions. Thus, a patient admitted with a neuropsychiatric diagnosis, who was found to be suffering also from a venereal disease, would be included in the tables under each of these diagnoses, although he would be included only once under the classification "disease." With one exception, malaria, the table items for individual diagnoses exclude from consideration readmissions, cases which have been previously reported. In the case of malaria, the numbers shown include both new cases and readmissions. Both new cases and readmissions, however, are counted in the general classification of total disease and injury.

Cases Carded For Record Only (CRO)

Individual medical records are prepared for certain individuals who are not treated on an excused-from-duty status, such as deaths and discharges for disability of Army personnel not currently patients in hospital or quarters; venereal disease cases treated on an outpatient status; and battle casualty cases and certain injury cases when treated on an outpatient status. Such cases when recorded are termed cases carded for record only, or CRO. The only CRO cases included in the Statistical Health Report are deaths, discharges on certificate of disability, and admissions for venereal disease.

Direct Admissions

All patients admitted to hospital or quarters (i.e. placed on a sick in hospital or sick in quarters status and not returned to duty before midnight of the day of first reporting for medical care), except those patients admitted by transfer from another Medical Department installation, and all reportable CRO cases, are termed direct admissions. A patient is tabulated as a direct admission only once for each continuous period of treatment, although he may be admitted to several Medical Department installations by transfer during the period.

Initial Hospital Admission

The term includes patients entering hospital as direct admissions, and patients transferred to hospital from non-hospital Medical Department installations.

Dispensary Type Care (Primary Medical Service)

This term refers to the medical service furnished by a dispensary, including dispensaries of hospitals. This type of service does not include hospitalization, but includes only care given to individuals being treated on an outpatient status or in quarters or dispensary beds.

Station Hospital Type Care

In the zone of interior this term signifies the first echelon of medical service involving hospitalization. At this echelon short-term (not specialized) treatment is provided and only relatively uncomplicated surgical procedures are undertaken. The bulk of the hospitalization required for troops is provided at the station hospital service level.

General Hospital Type Care

In the zone of interior this type of service is provided only in general hospitals to patients requiring long periods of observation and treatment or highly specialized treatment. Patients

ADMINISTRATIVE DIVISION

DEFINITIONS OF TERMS (Continued)

evacuated from overseas are ordinarily admitted to this type of care.

Pneumonia, All Forms

Includes all primary bacterial and viral pneumonias and pneumonias occurring with or secondary to some other morbid condition.

Common Respiratory Disease and Influenza

This category consists of acute catarrhal bronchitis, acute coryza, acute catarrhal pharyngitis, acute catarrhal nasopharyngitis, acute catarrhal laryngitis, and influenza.

Diarrhea and Dysentery

This category includes all cases diagnosed as colitis, diarrhea (cause undetermined), enteritis, enterocolitis, and intestinal indigestion and toxemia associated with diarrhea. Bacterial food poisonings, characterized by outbreaks of vomiting and diarrhea occurring simultaneously in groups of individuals who have all consumed the same suspected food or drink, are not included in this category.

Certificate of Disability For Discharge (CDD)

This term includes only discharges of enlisted personnel for disability under the provisions of AR 615-361 (formerly Sections II, AR 615-360). Retirements of enlisted personnel and separations of officers for disability are not included.

Existed Prior to Service (EPTS)

This term refers to diseases or injuries concerning which clear and unmistakable evidence indicates that the condition existed prior to an individual's entry into military service.

Incidence Rates and Admission Rates

The incidence of a condition may be observed over periods of different length, such as a week, month, or year. In order to facilitate comparisons of incidence among such periods, rates are computed on an annual basis. Such rates show the number of cases per thousand strength that would occur during a year if cases occurred throughout the year at the same rate as in the report period.

The distinction between incidence and admission rates arises from the fact that a patient, already admitted to hospital or quarters for some condition, may incur one or more additional morbid conditions during his stay: each additional diagnosis contributes to the incidence rate for the condition concerned, but does not add to the admission rate.

Non-effective Rate

This rate indicates the average number of patients in hospital or quarters per thousand mean strength during the report period.

Mean Strength

For individual stations the mean strength is the average number of troops present in all the organizations to which the reporting medical unit has furnished primary medical service during the report period, plus the average number of personnel absent from these organizations and not counted in any other organization's strength, such as personnel traveling individually, persons on leave, or persons who are AWOL. The mean strengths for Army troops in any specific geographic area are derived by totaling the mean strengths of the individual stations.

ADMINISTRATIVE DIVISION

Following is a list of publications which are of particular interest to the Medical Department:

DEPARTMENT OF THE ARMY CIRCULARS

Cir No	Subject	Date
26	Appointment of Professional and Technical Specialists or Specialists in ORC	1 March 49
30	Officer Candidate School	4 March 49
31	Classification of Enlisted Personnel	9 March 49
33	Army Regulations and Special Regulations	11 March 49
34	Supersession of War Department and Department of the Army Directives	16 March 49
37	Short Story Contest	18 March 49
41	Supersession of War Department and Department of the Army Directives	22 March 49
46	Geographical Addresses on Mail Through APO's	29 March 49
48	Information and Education - Rescission Department of the Army Circular 234, 1948 as amended.	31 March 49

MILITARY DISTRICT OF WASHINGTON MEMORANDA

Memo No	Subject	Date
17	Special Regulations	7 March 49
18	Hospitalization and Evacuation in the Military District of Washington	8 March 49
21	Operation of Private Motor Vehicles on Military Reservations	22 March 49
22	Hospitalization and Evacuation in the Military District of Washington, Amendment	24 March 49
31	Establishment of "Off Limits"	31 March 49

DEPARTMENT OF ARMY SPECIAL REGULATIONS

SR No	Subject	Date
40-590-42	Admission to Hospital-U.S. Public Health Beneficiaries	15 March 49
40-590-43	Admission to Hospital-Merchant Seamen	9 March 49
40-590-44	Admission to Hospital-Members of U.S. Old Soldiers Home	30 March 49
310-90-1	Distribution and Supply of Blank Forms	15 March 49
345-920-1	Disposition of Records	15 March 49
600-145-5	Assignment of Hospital Patients	30 March 49
615-215-1	Selection of Enlisted Men for Attendance at ZI Service Schools	9 March 49

